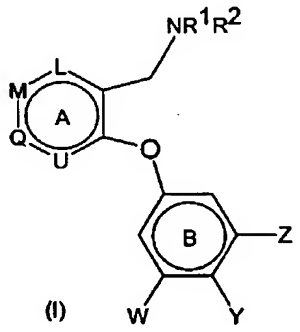
Patent Application
Attorney Docket No. PC10973B

IN THE CLAIMS

1. (Currently amended) A compound of general formula (I), or pharmaceutically acceptable salts~~, solvates or polymorphs~~ thereof;



(I)

wherein;

L and U, which may be the same or different, are -N-, -N$^+$(-O$^-$)- or -C(H)-;

M and Q, which may be the same or different, are -N-, -N$^+$(-O$^-$)- or -C(R^4)-;

wherein ring A contains 1 nitrogen atom;

R^1 and R^2, which may be the same or different, are hydrogen, C_{1-6}alkyl, $(CH_2)_m(C_{3-6}$cycloalkyl) wherein m = 0, 1, 2 or 3, or R^1 and R^2 together with the nitrogen to which they are attached form an azetidine ring;

W, Y and Z, which may be the same or different, are hydrogen, halogen, C_{1-6}alkyl, CF_3, OCF_3, C_{1-4}alkylthio or C_{1-4}alkoxy; or Y and Z are linked so that, together with the interconnecting atoms, Y and Z form a fused 5 to 7-membered carbocyclic or heterocyclic ring which may be saturated, unsaturated or aromatic, and wherein when Y and Z form a heterocyclic ring, in addition to carbon atoms, the linkage contains one or two heteroatoms independently selected from oxygen, sulfur and nitrogen; and wherein W, Y and Z are not all hydrogen; and

each R^4 is independently:

A-X, wherein A = -$(CH_2)_p$- where p is 0, 1 or 2; X is hydrogen, $CONR^6R^7$, $SO_2NR^6R^7$, $SO_2NHC(=O)R^8$, hydroxy, C_{1-4}alkoxy, $NR^8SO_2R^9$, NO_2, NR^6R^{11}, CN, CO_2R^{10}, SR^{10}, $S(O)R^9$ or SO_2R^{10}; R^6, R^7, R^8 and R^{10} which may be the same or different, are hydrogen or C_{1-6}alkyl optionally substituted independently by one or more R^{12}; R^9 is C_{1-6} alkyl optionally substituted independently by one or more R^{12}; R^{11} is hydrogen, C_{1-6} alkyl

optionally substituted independently by one or more R^{12}, $C(O)R^6$, CO_2R^9, $C(O)NHR^8$ or $SO_2NR^6R^7$; R^{12} is fluoro, hydroxy, CO_2H, C_{3-6}cycloalkyl, NH_2, $CONH_2$, C_{1-6}alkoxy, C_{1-6}alkoxycarbonyl or a 5- or 6-membered heterocyclic ring containing 1, 2 or 3 heteroatoms selected from N, S and O optionally substituted independently by one or more R^{13}; or R^6 and R^7, together with the nitrogen to which they are attached, form a 4-, 5- or 6-membered heterocyclic ring optionally substituted independently by one or more R^{13}; or a 5- or 6-membered heterocyclic ring containing 1, 2 or 3 heteroatoms selected from N, S and O, optionally substituted independently by one or more R^{13}; wherein R^{13} is hydroxy, C_1-C_4alkoxy, fluoro, C_1-C_6alkyl, haloalkyl, haloalkoxy, $-NH_2$, $-NH(C_1$-C_6alkyl) or $-N(C_1$-C_6alkyl$)_2$.

2. (Cancelled)

3. (Previously presented) A compound according to claim 1 wherein L is -C(H)-.

4. (Original) A compound according to claim 1 wherein R^1 and R^2, which may be the same or different, are hydrogen or C_1-C_6alkyl, or R^1 and R^2, together with the nitrogen to which they are attached, form an azetidine ring.

5. (Original) A compound according claim 1 wherein R^1 is methyl and R^2 is hydrogen or methyl, or R^1 and R^2, together with the nitrogen to which they are attached, form an azetidine ring.

6. (Original) A compound according to claim 1 wherein R^1 is methyl and R^2 is hydrogen or methyl.

7. (Original) A compound according to claim 1 wherein W is hydrogen, C_{1-6}alkyl, C_{1-4}alkoxy or halogen.

8. (Original) A compound according to claim 1 wherein W is hydrogen, methyl or ethyl; and Y and Z, which may be the same or different, are hydrogen, methyl, ethyl, CF_3, OCF_3, methylthio, ethylthio, methoxy, ethoxy, chloro, fluoro or bromo; or Y

and Z are linked so that, together with the interconnecting atoms, Y and Z form a fused 5 to 7-membered carbocyclic or heterocyclic ring which may be saturated, unsaturated or aromatic, and wherein when Y and Z form a heterocyclic ring, in addition to carbon atoms, the linkage contains one or two heteroatoms independently selected from oxygen, sulfur and nitrogen; wherein W, Y and Z are not all hydrogen.

9. (Original) A compound according to claim 1 wherein W is hydrogen; and Y and Z, which may be the same or different, are hydrogen, fluoro, chloro, methyl, ethyl, methylthio, ethylthio, methoxy or ethoxy; or Y and Z are linked so that, together with the interconnecting atoms, Z and Y form a fused 5 to 7-membered heterocyclic ring containing one or more sulfur atoms; wherein Y and Z are not both hydrogen.

10. (Original) A compound according to claim 1 wherein when Y and Z are linked so that, together with the interconnecting atoms, Z and Y form a fused 5 to 7-membered heterocyclic ring containing one or more sulfur atoms, the linkages forming the fused ring are $-S(CH_2)_2-$, $-CH_2S-CH_2-$ or $-S(CH_2)_2O-$ wherein either end of these linkages correspond to either group Y or Z.

11. (Original) A compound according to claim 1 wherein, when present, each R^4 is independently $-(CH_2)_p-X$, where p is 0, 1 or 2; X is hydrogen, $CONR^6R^7$, $SO_2NR^6R^7$, $SO_2NH(C=O)R^6$, hydroxy, C_{1-4}alkoxy, $NR^8SO_2R^9$, NO_2, NR^6R^{11}, CN, CO_2R^{10}, SR^{10}, $S(O)R^9$ or SO_2R^{10}; wherein R^6, R^7, R^8, R^{10}or R^{11}, which may be the same or different, are hydrogen or C_{1-6}alkyl; and R^9 is C_{1-6}alkyl.

12. (Original) A compound according to claim 1 wherein, when present each R^4 is independently $-(CH_2)_p-X$, where p is 0 or 1; X is hydrogen, $CONR^6R^7$, $SO_2NR^6R^7$, $NR^8SO_2R^9$, hydroxy or NR^6R^{11}; wherein R^6, R^7, R^8, or R^{11}, which may be the same or different, are hydrogen or C_{1-6}alkyl; and R^9 is C_{1-6}alkyl.

13. (Original) A compound according to claim 1 wherein the compound is selected from:

N-methyl-*N*-({4-[4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)amine,

N-{[4-(2,3-dihydro-1-benzothien-5-yloxy)-3-pyridinyl]methyl}-*N*-methylamine,

N-({4-[3-chloro-4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)-*N*-methylamine,

N-methyl-*N*-({3-[4-(methylsulfanyl)phenoxy]-4-pyridinyl}methyl)amine,

N-methyl-*N*-({3-[3-methyl-4-(methylsulfanyl)phenoxy]-4-pyridinyl}-methyl)amine,

N-{[4-(2,3-Dihydro-1,4-benzoxathiin-7-yloxy)-6-methyl-3-pyridinyl]methyl}-*N*-methylamine,

N-methyl-*N*-({6-methyl-4-[3-methyl-4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)amine,

N-({4-[3-chloro-4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)-*N*,*N*-dimethylamine,

N-({4-[3-fluoro-4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)-*N*,*N*-dimethylamine,

N,*N*-dimethyl-*N*-({3-[4-(methylsulfanyl)phenoxy]-4-pyridinyl}methyl)amine,

N-{[4-(2,3-dihydro-1-benzothien-5-yloxy)-3-pyridinyl]methyl}-*N*,*N*-dimethylamine,

N-({4-[3-Methoxy-4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)-*N*,*N*-dimethylamine,

N,*N*-dimethyl-*N*-({4-[4-(trifluoromethyl)phenoxy]-3-pyridinyl}methyl)amine,

N,*N*-dimethyl-*N*-({4-[4-(methylsulfanyl)phenoxy]-3-pyridinyl}methyl)amine, and

N,*N*-dimethyl-*N*-({4-[3-methyl-4-(methylsulfanyl)phenoxy]-3-pyridinyl}-methyl)amine.

14. (Currently amended) A composition comprising a compound of formula (I) of any one of claims 1, and 3-13, or pharmaceutically acceptable salts~~, solvates or polymorphs~~ thereof, and a pharmaceutically acceptable diluent or carrier.

15. (Currently Amended) A therapeutic method of treating ~~or preventing~~ premature ejaculation comprising administering a therapeutically effective amount of a compound of formula (I) of any one of claims 1, and 3-13, or a pharmaceutically acceptable salt~~, solvate or polymorph~~ thereof to a subject having a need of treatment or prevention of premature ejaculation.

16-18. (Cancelled)

19. (Previously presented) The compound N-methyl-N-({3-[3-methyl-4-(methylsulfanyl)phenoxy]-4-pyridinyl}-methyl)amine or a pharmaceutically acceptable salt thereof.

20. (Previously presented) The tartrate salt of the compound of claim 19.

21. (Previously presented) The compound N-methyl-N-({3-[4-(methylsulfanyl)phenoxy]-4-pyridinyl}-methyl)amine or a pharmaceutically acceptable salt thereof.

22. (Previously presented) The tartrate salt of the compound of claim 21.